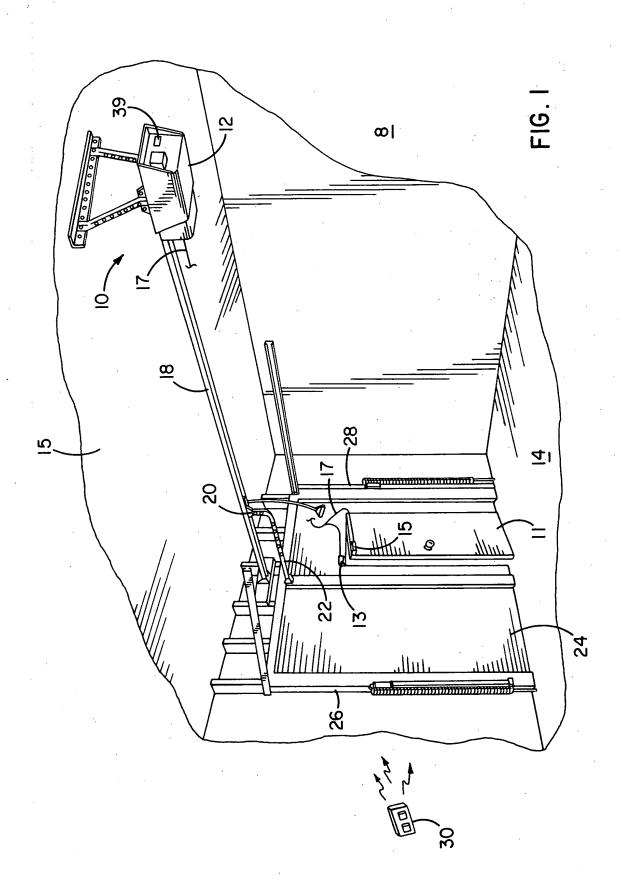
Fitzgibbon et al.

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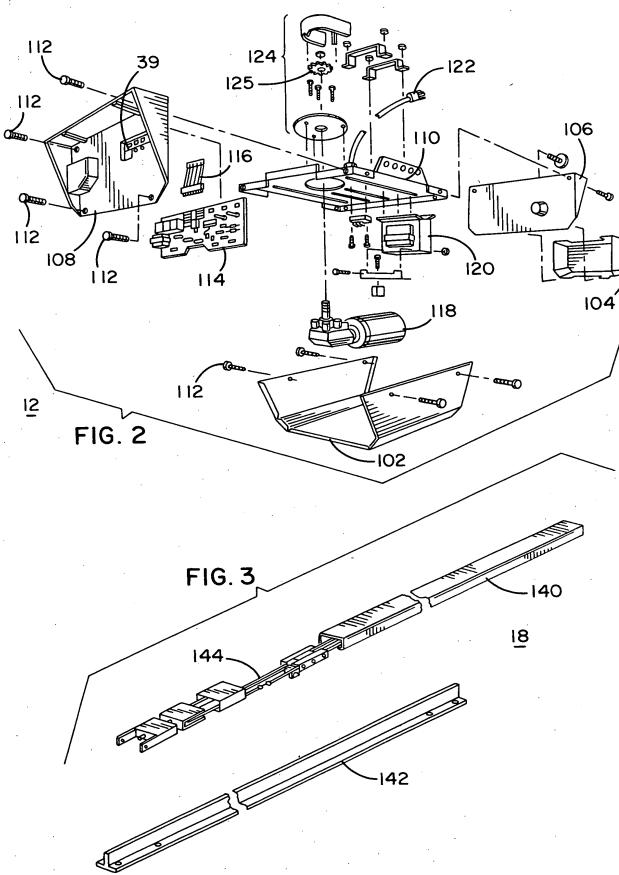


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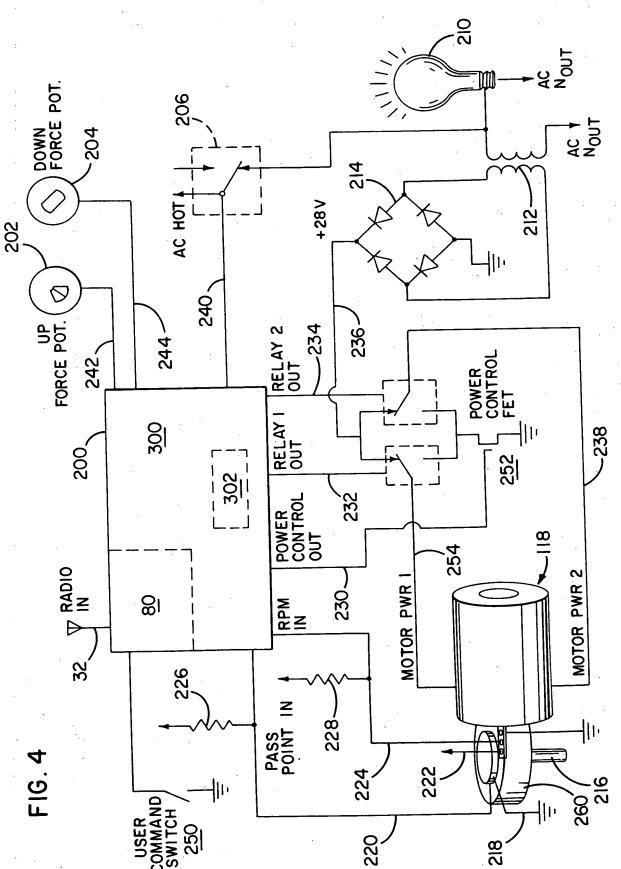
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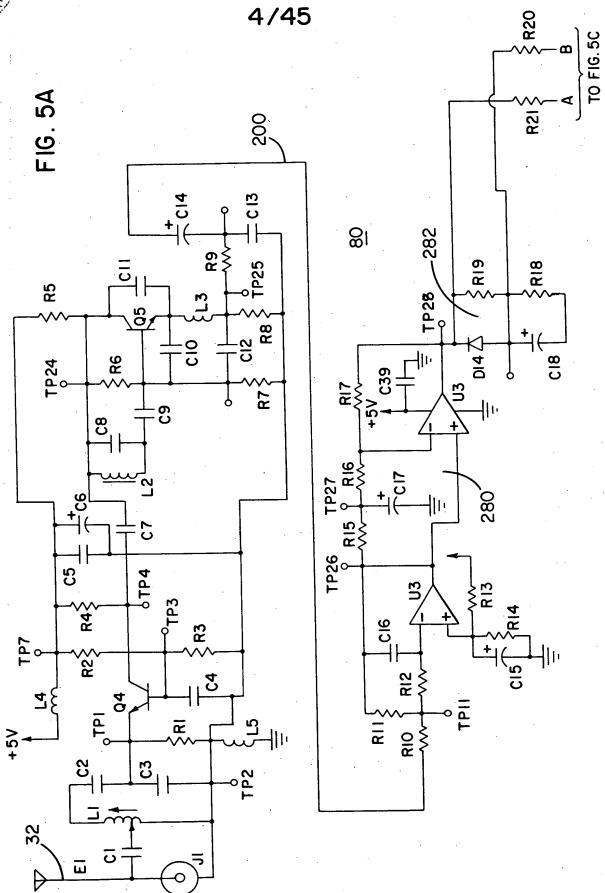
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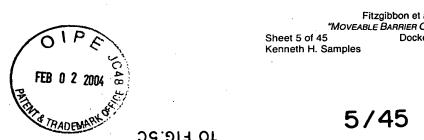


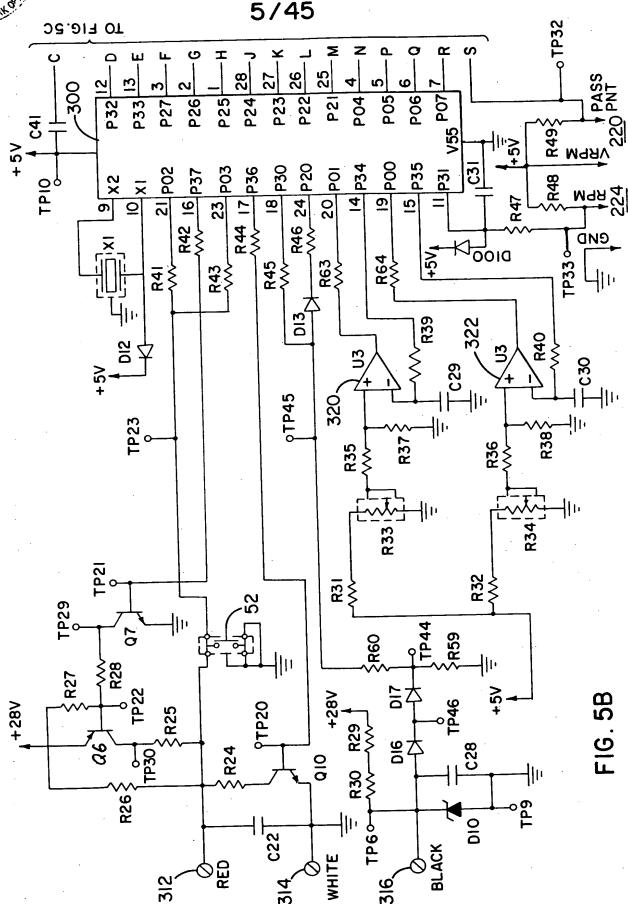




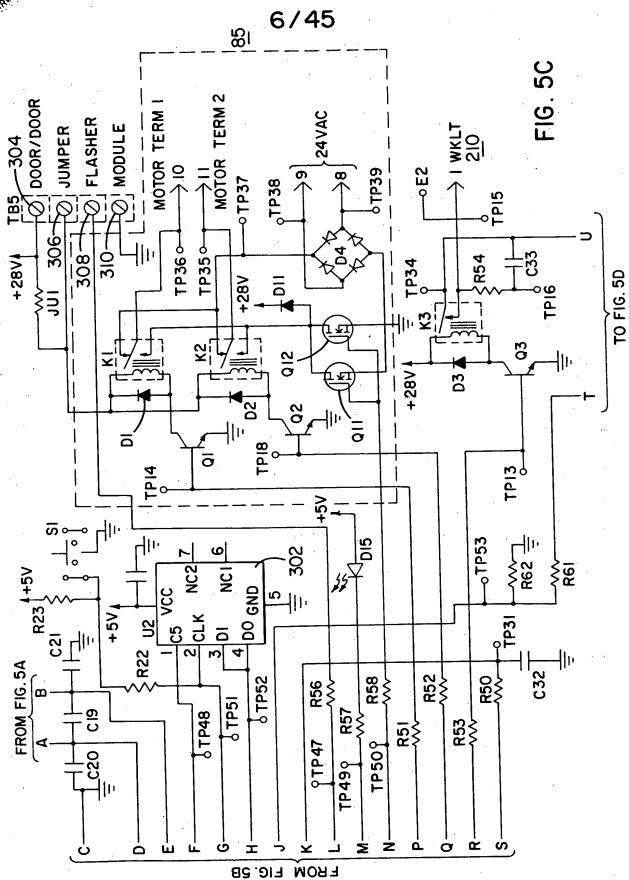














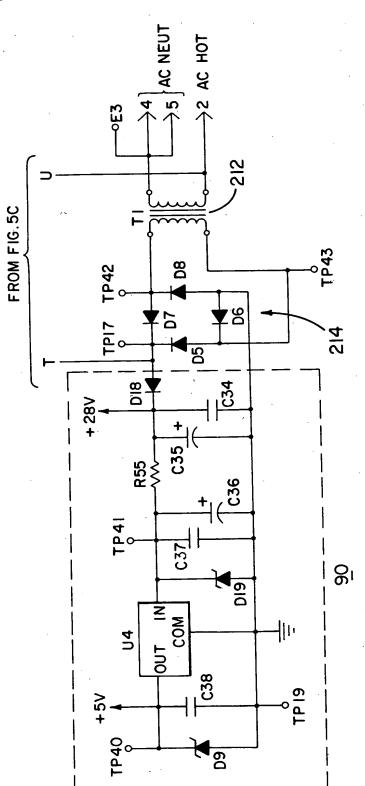


FIG. 5D

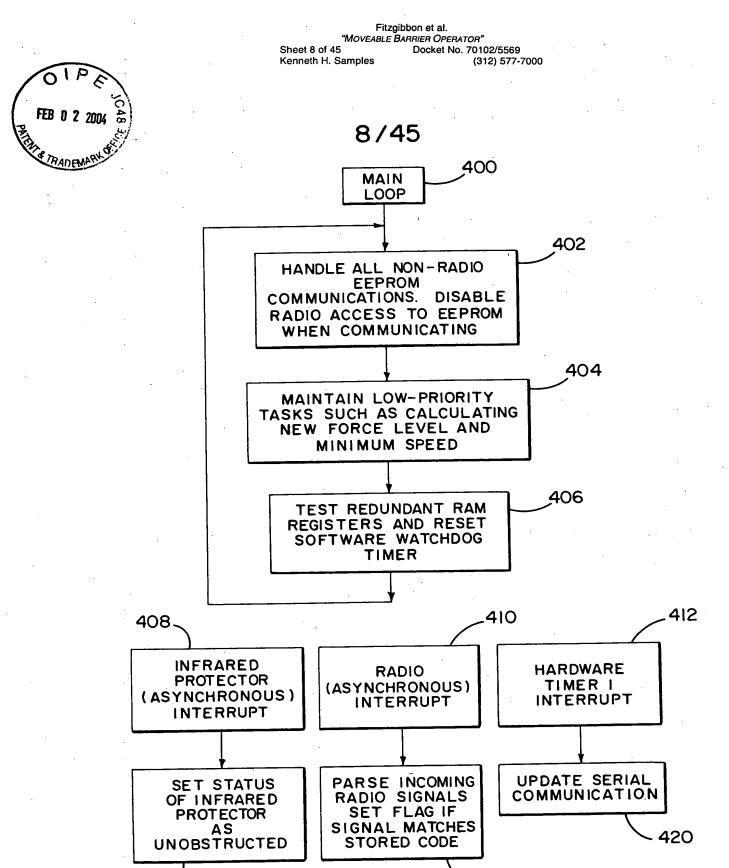


FIG. 6A

416

-418

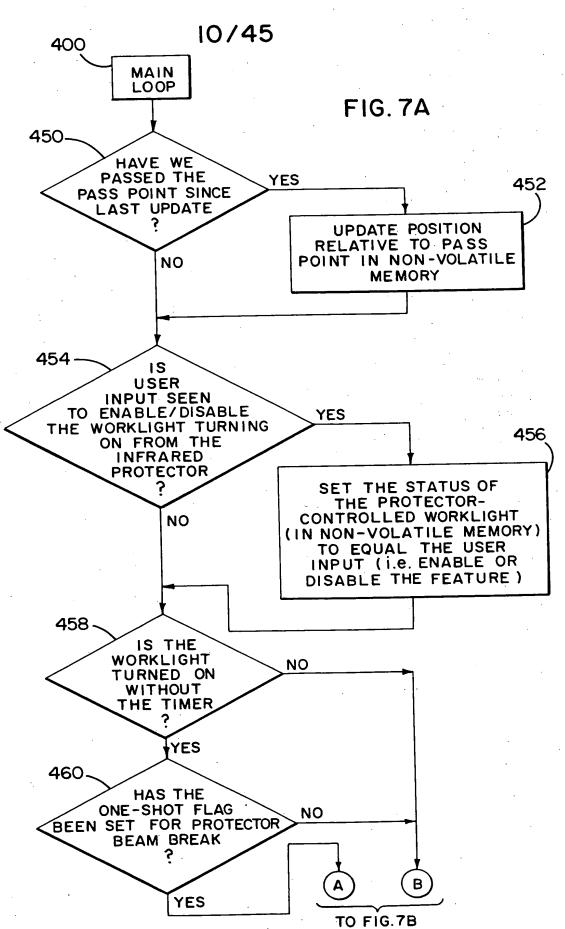
Fitzgibbon et al. "MOVEABLE BARRIER OPERATOR"
Docket No. 70102/5569 Sheet 9 of 45 (312) 577-7000 Kenneth H. Samples OIP FEB 0 2 2004 🕏 9/45 422 **HARDWARE** TIMERO INTERRUPT 424 READ INCOMING AC LINE SIGNAL AND HANDLE MOTOR PHASE CONTROL OUTPUT 426 TASK SWITCH THE FOLLOWING TASKS: CONTROL MOTOR **UPDATE DEBOUNCE** INCLUDING RELAY SOFT WARE WALL OUTPUTS AND MOTOR TIMERS CONTROL SAFETY SYSTEMS SWITCHES 428 430 432 434 **RPM** (ASYNCHRONOUS) INTERRUPT 436 CALCULATE MOTOR RPM PERIOD UPDATE POSITION

OF DOOR

438

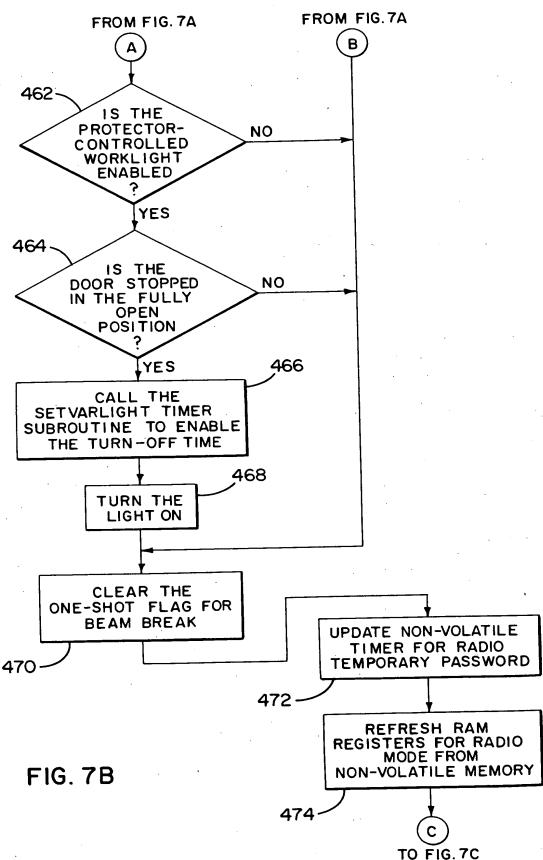
FIG. 6B

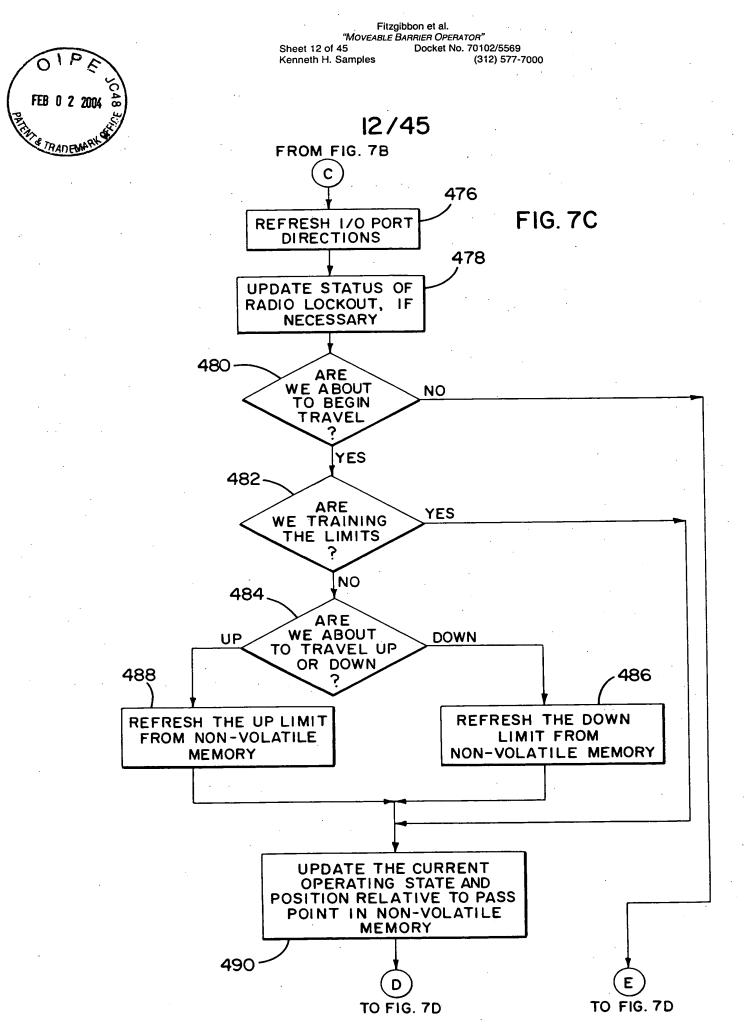




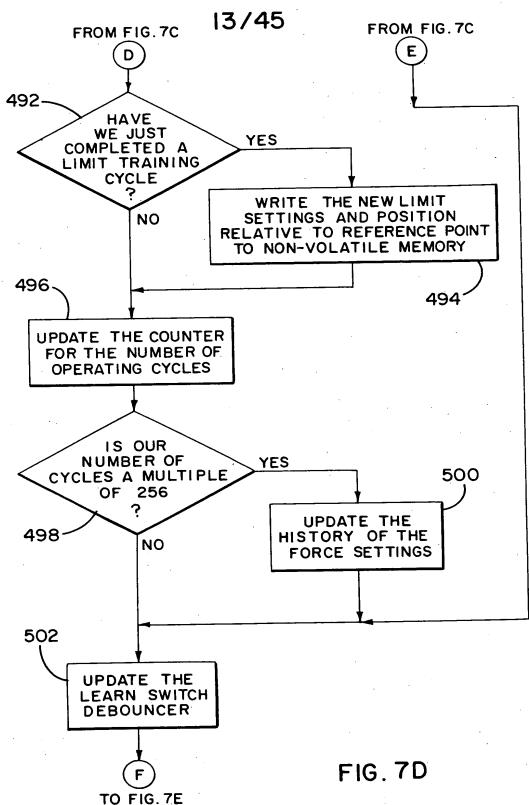




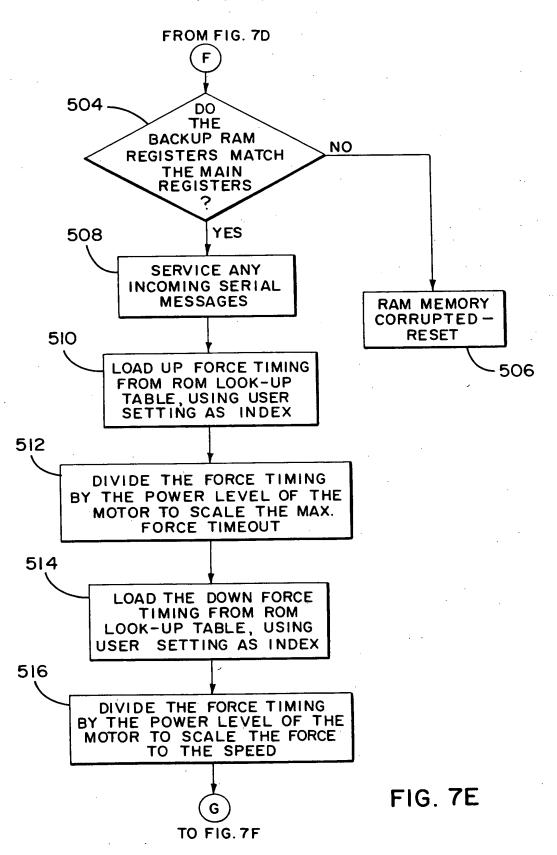










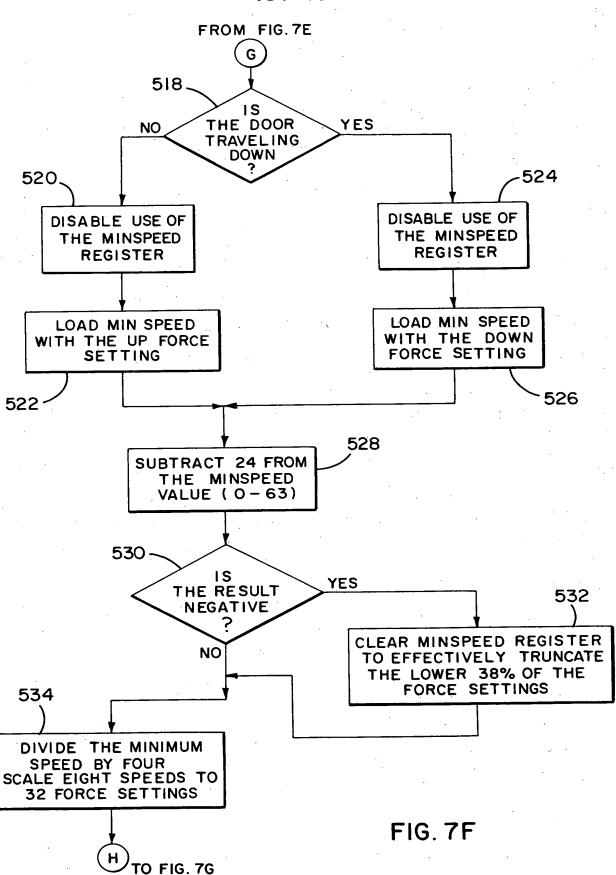


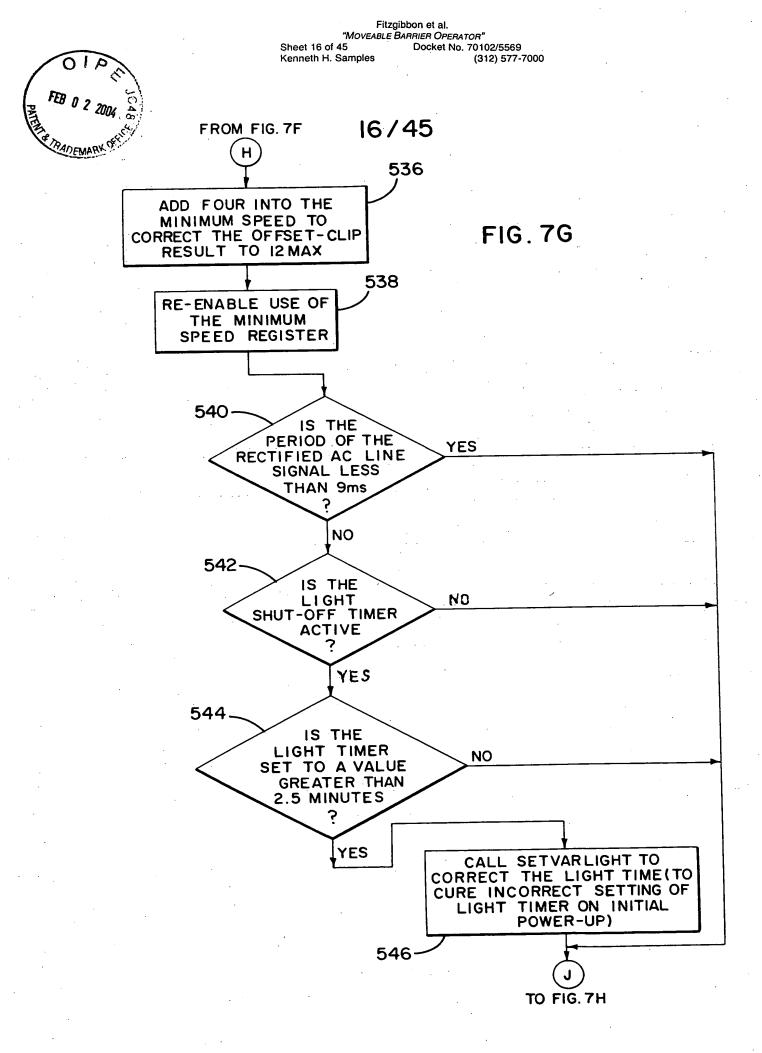
Fitzgibbon et al.

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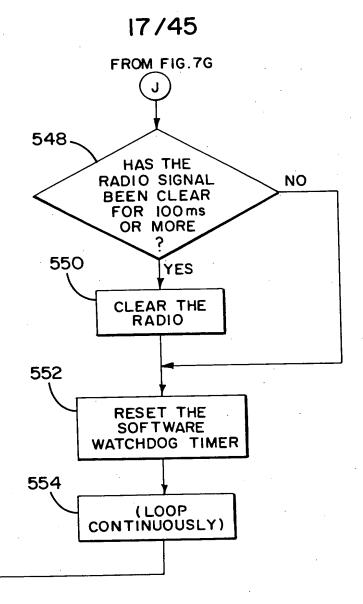


FIG. 7H



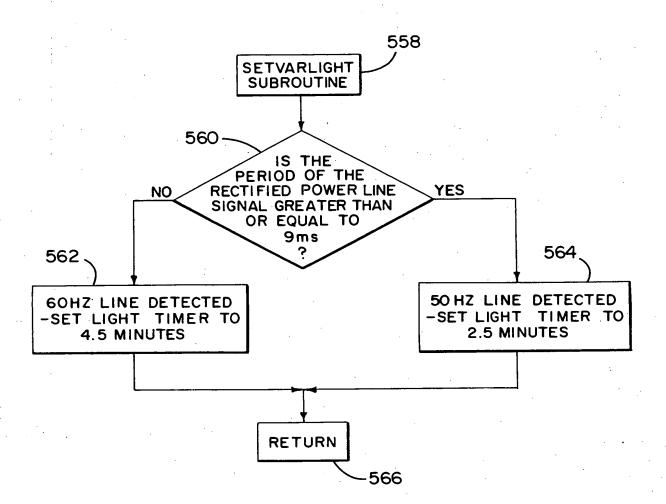
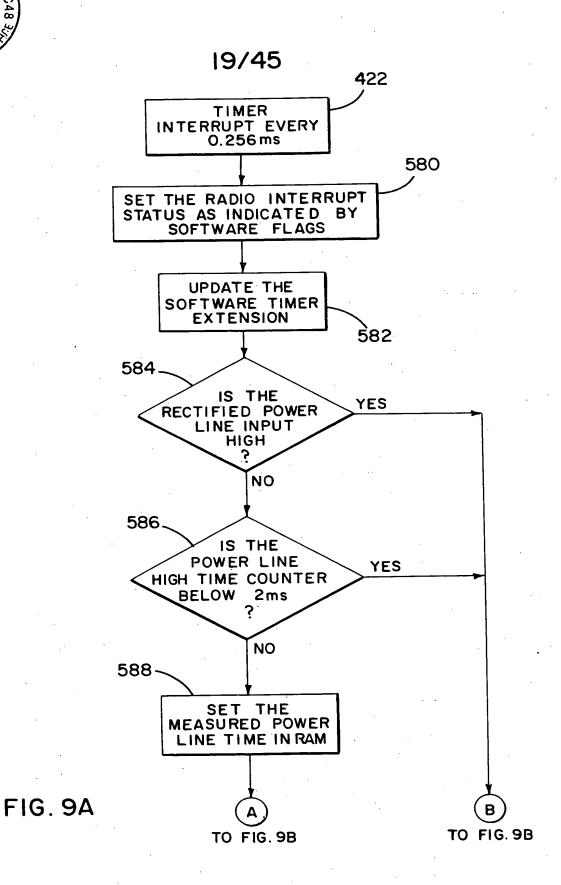
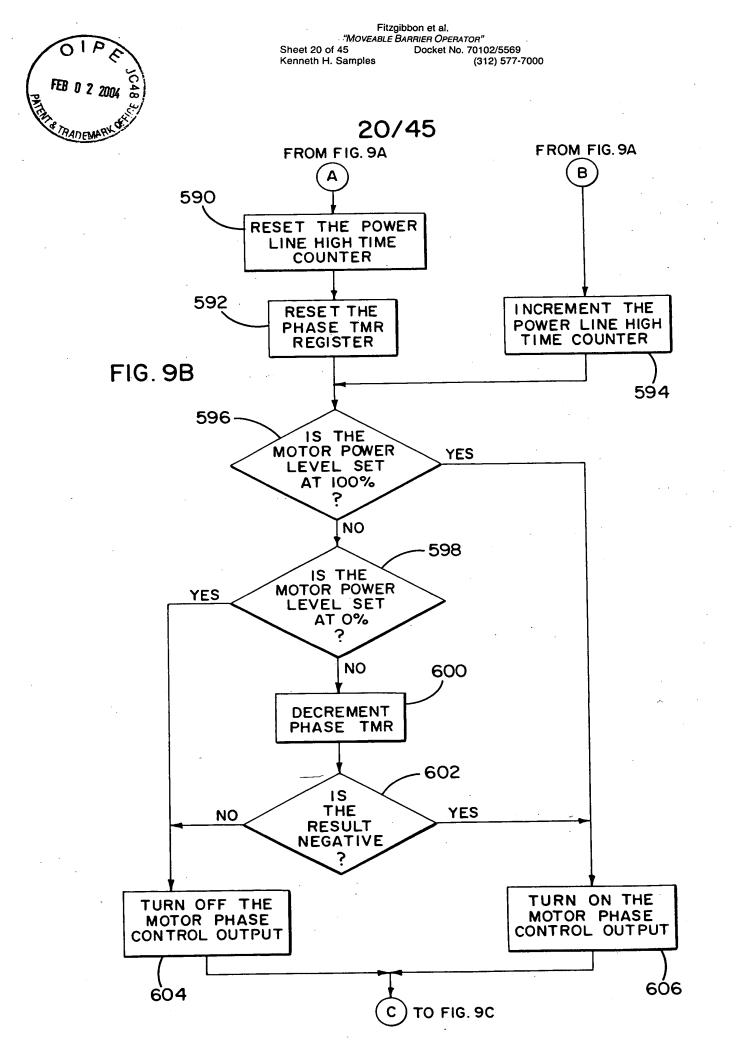
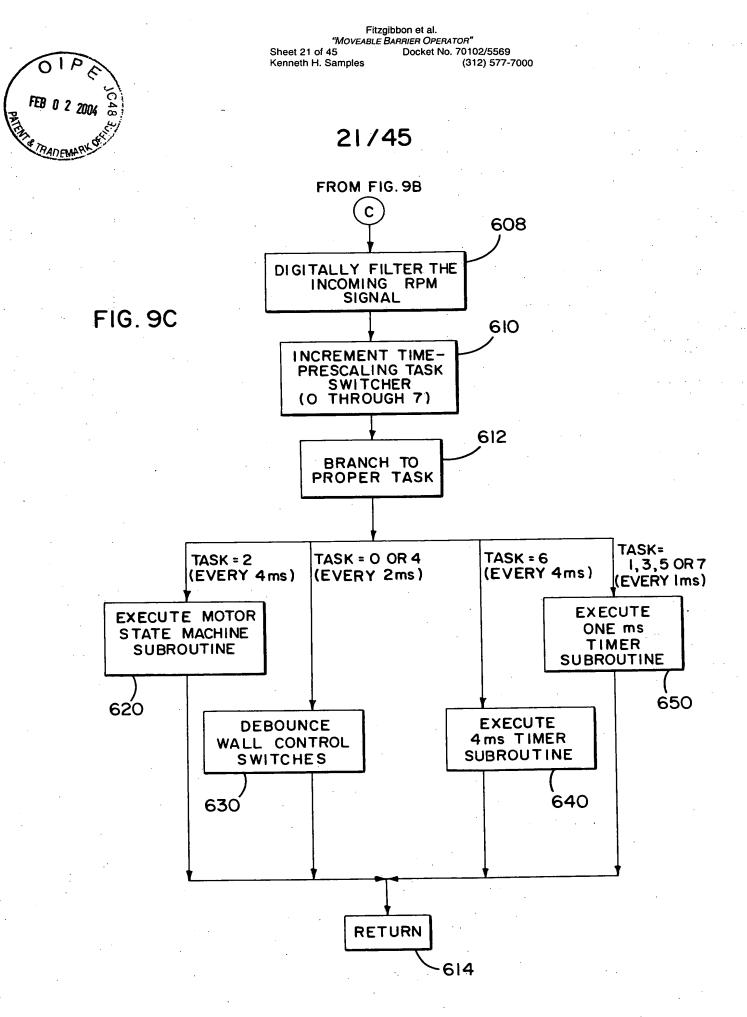


FIG. 8

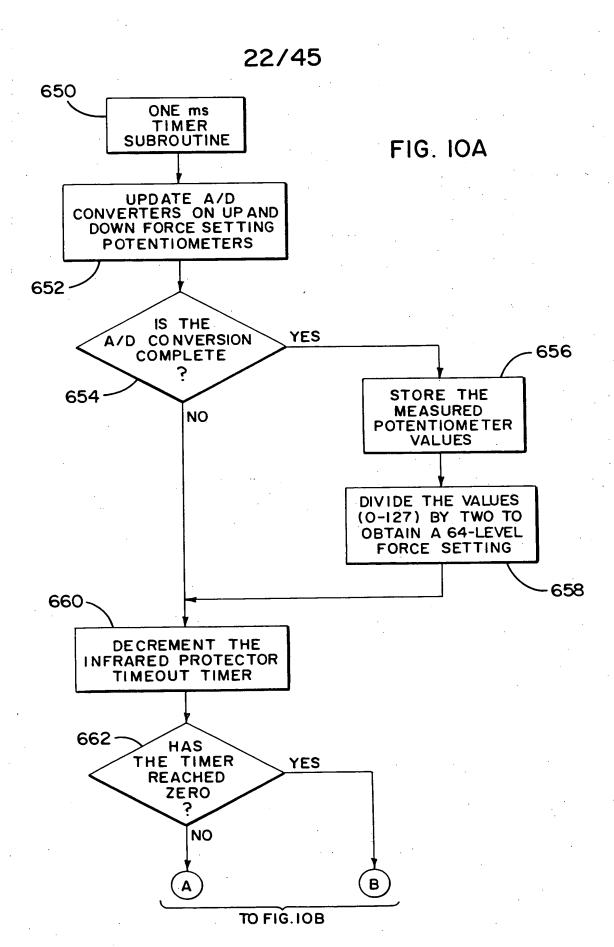




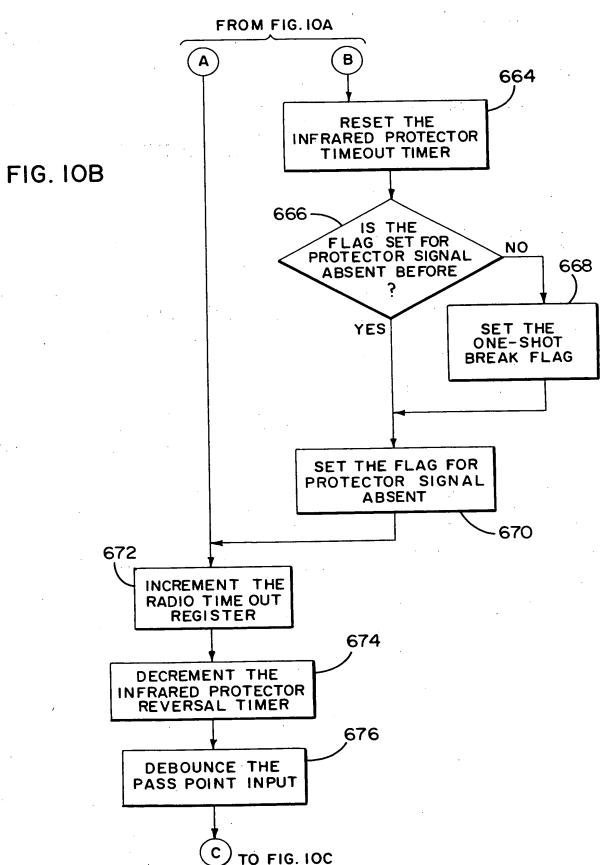














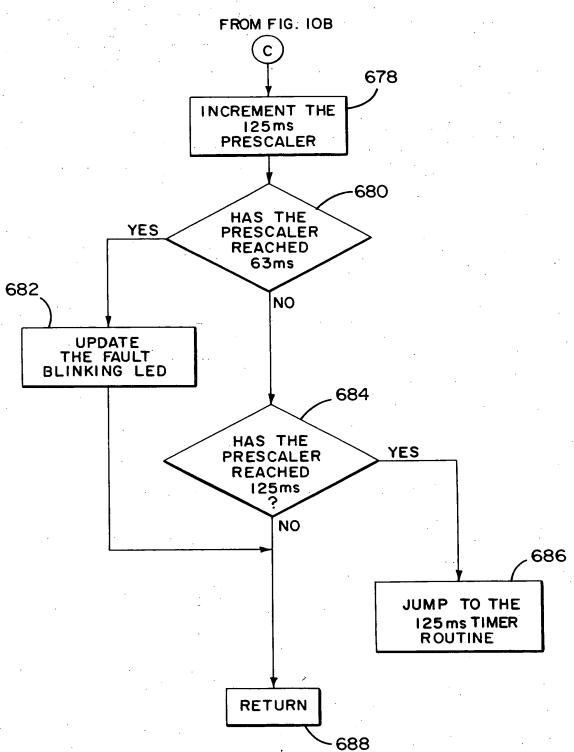
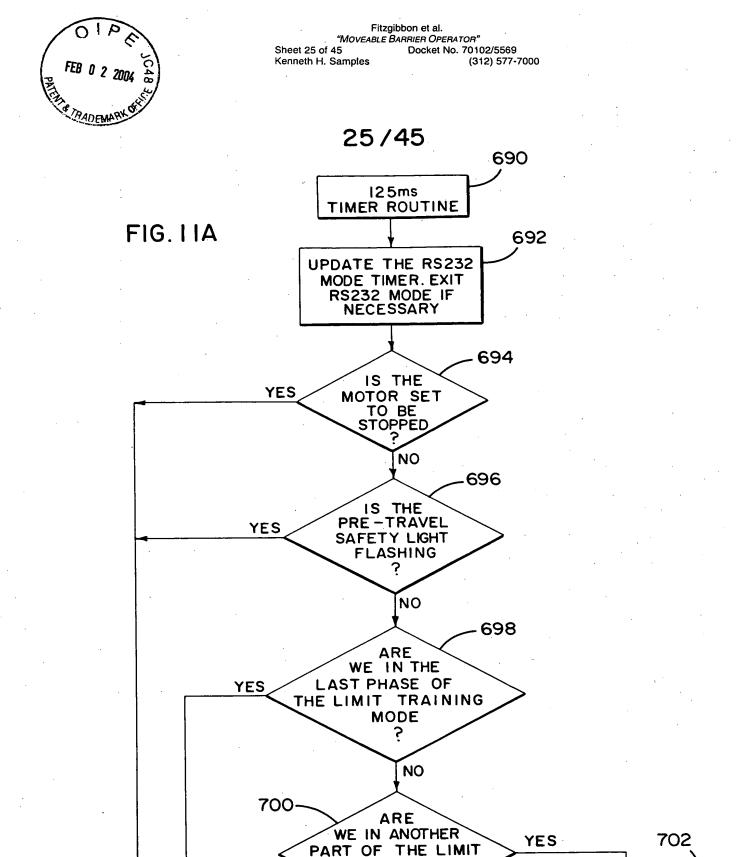


FIG. IOC



TRAINING MODE

TO FIG. IIB

NO

TO FIG. IIB

SET FLAG FOR MOTOR RAMP-UP

COMPLETE

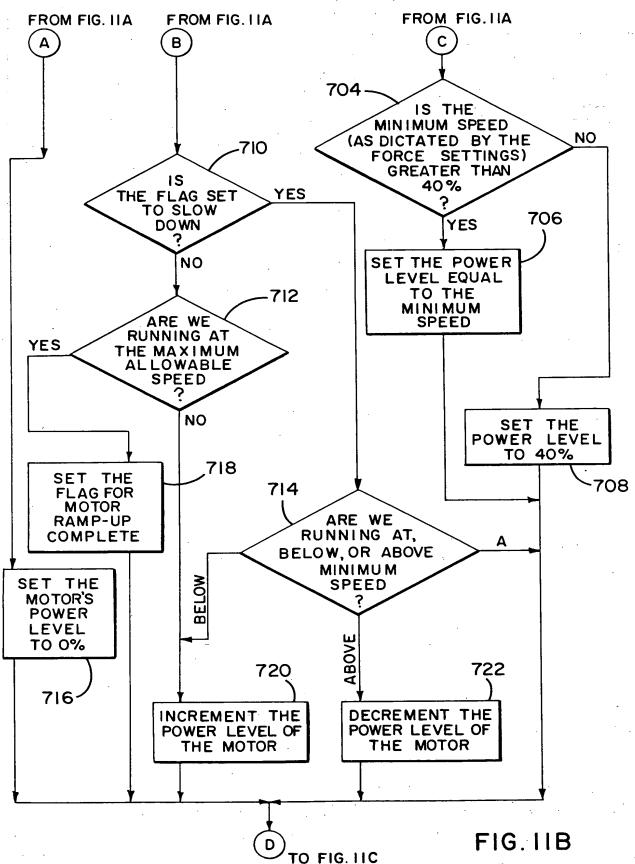
TO FIG. IIB

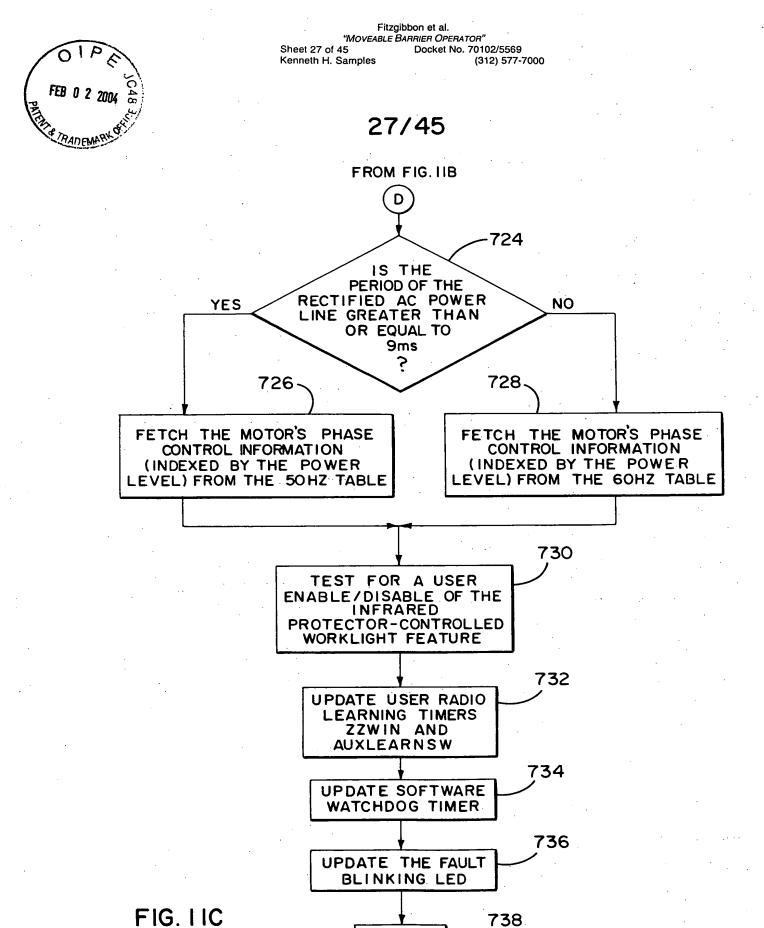
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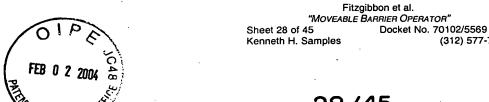
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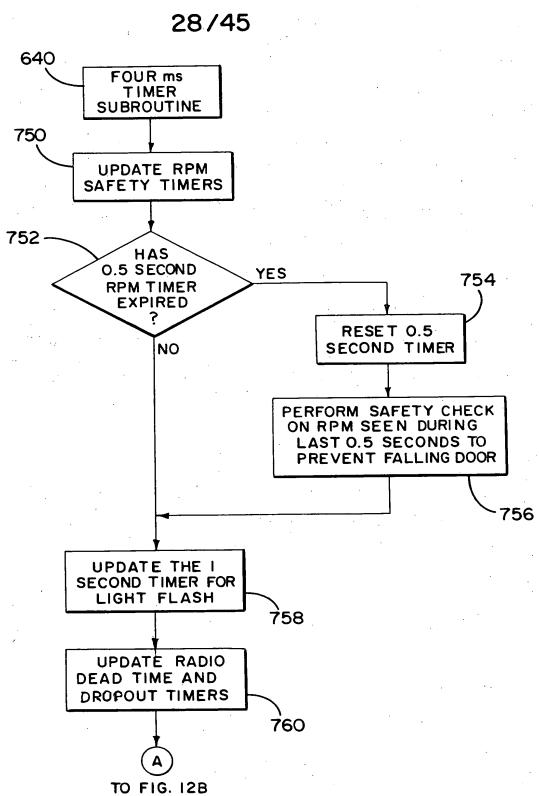






RETURN





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FIG. 12A



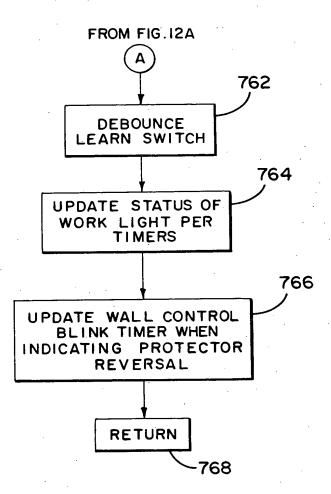
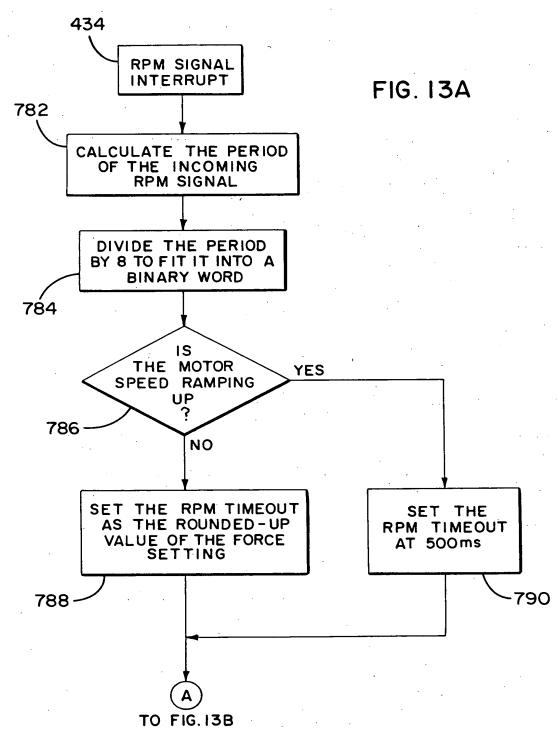


FIG. 12B



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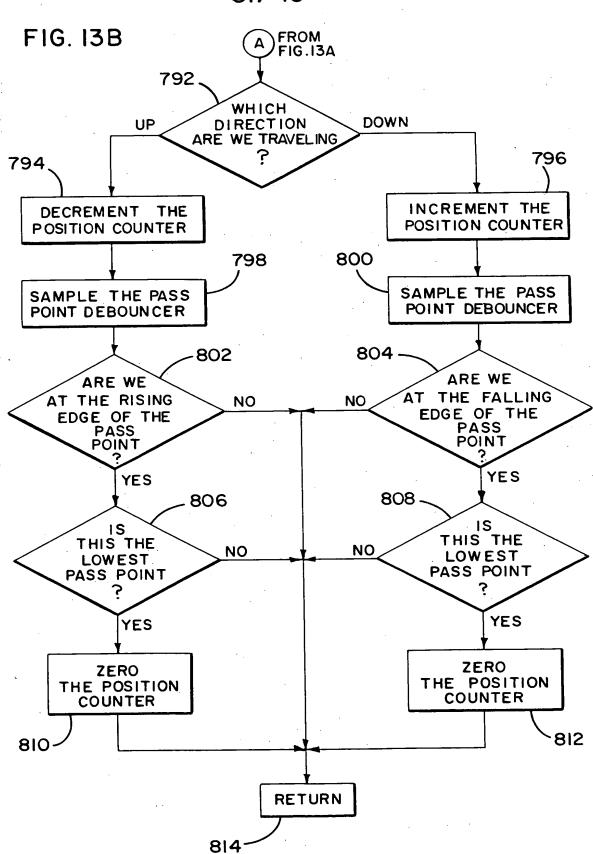


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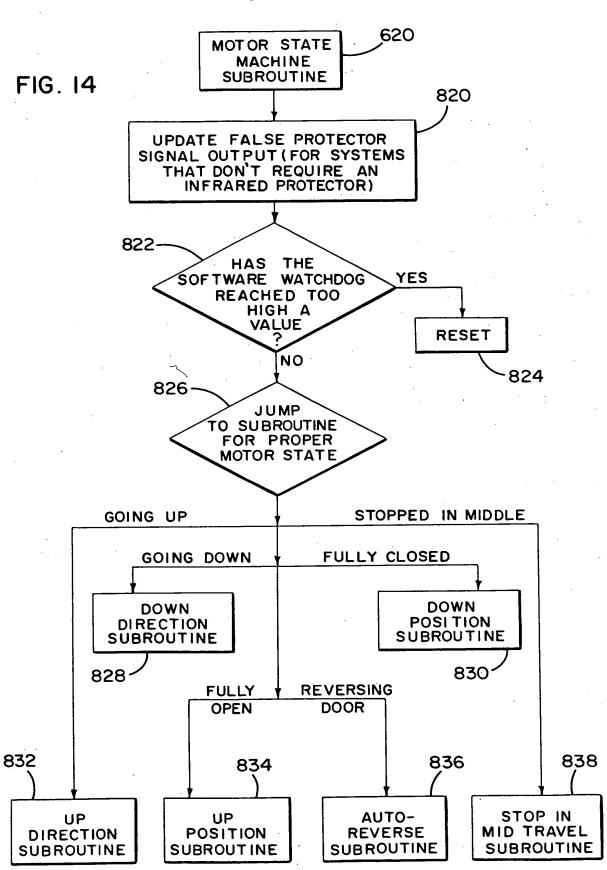
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Kenneth H. Samples





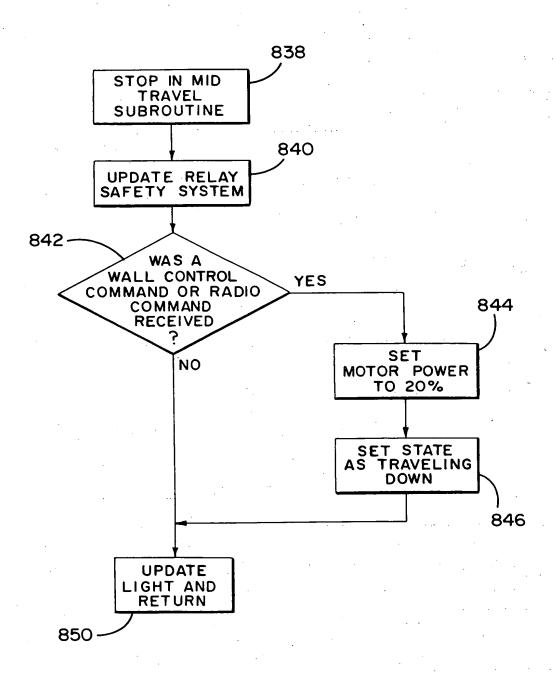


FIG. 15



Fitzgibbon et al.:

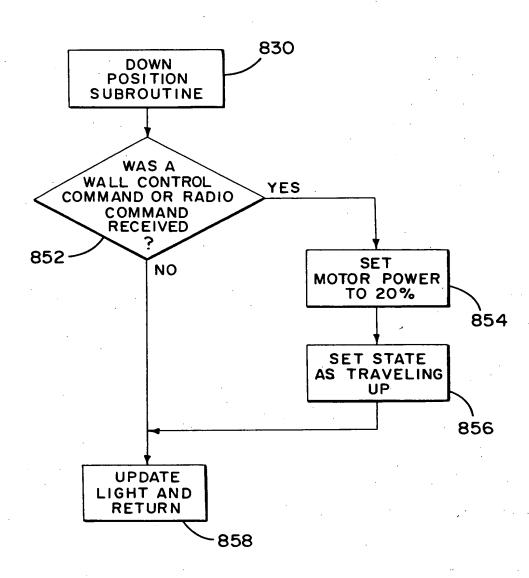
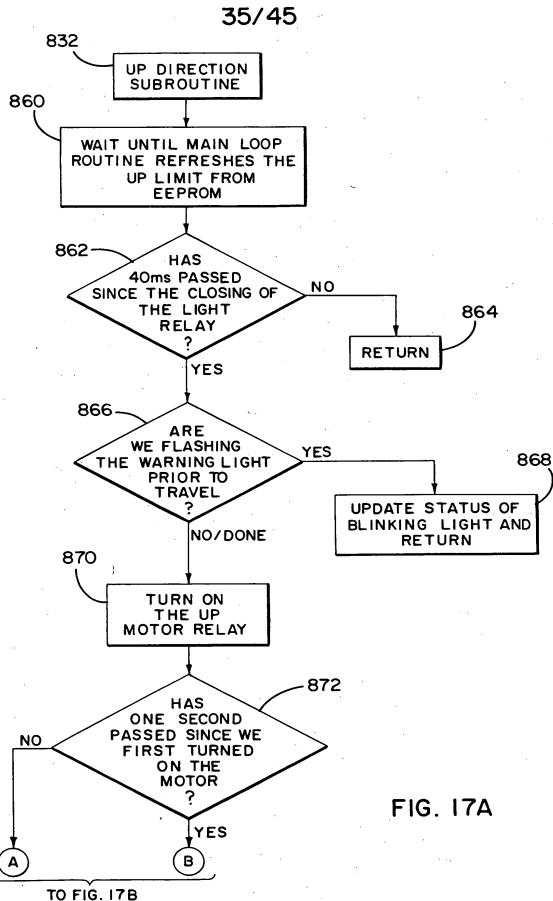
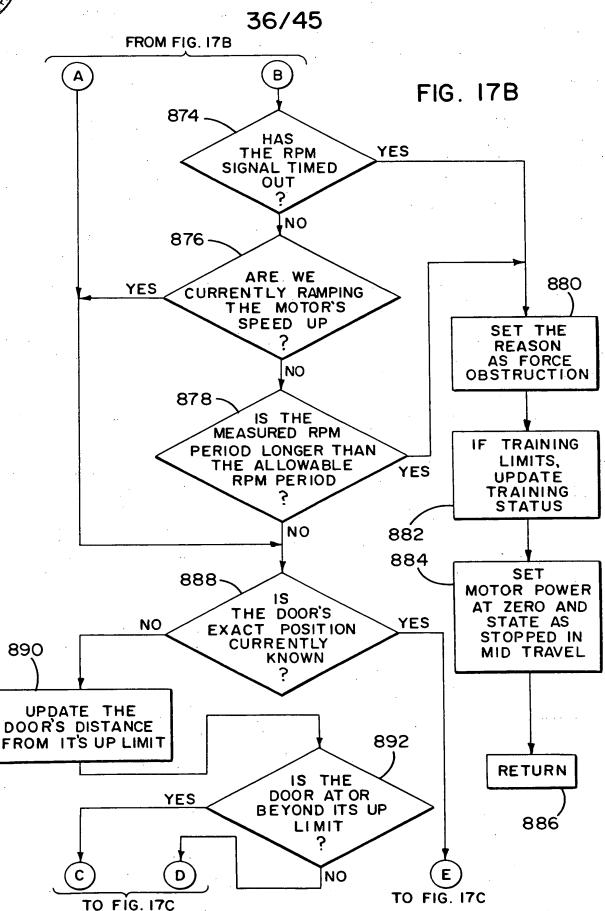


FIG. 16



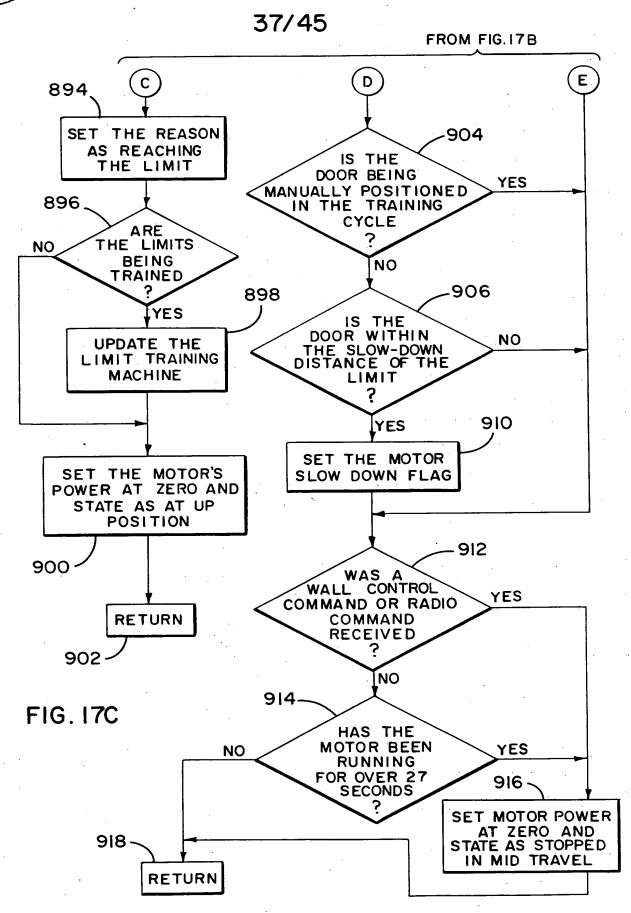






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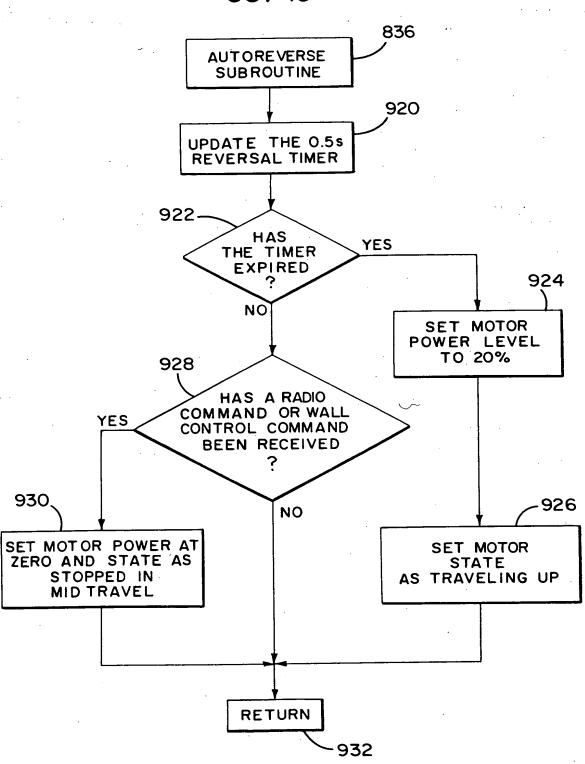
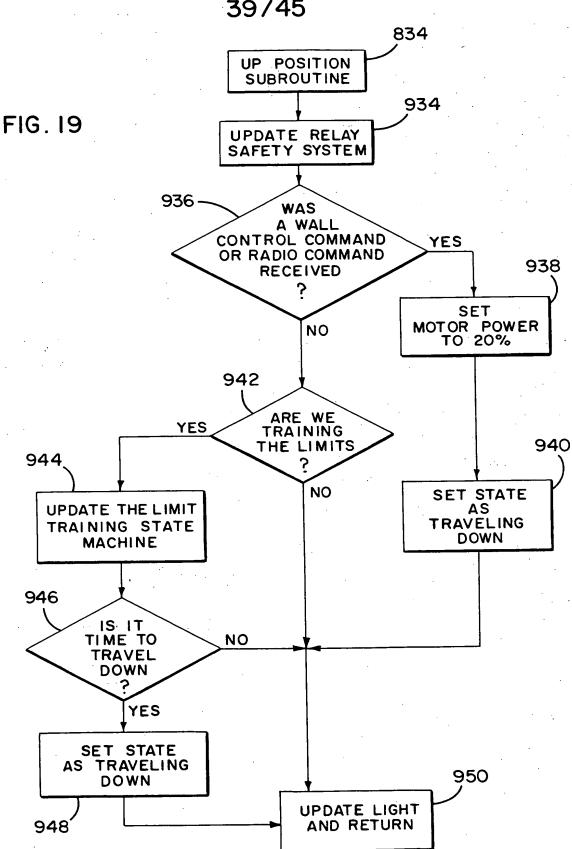


FIG. 18

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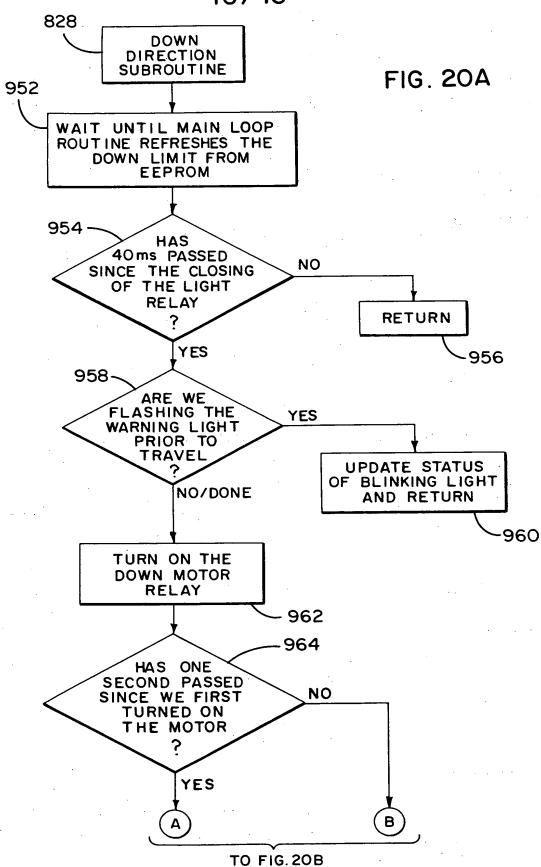


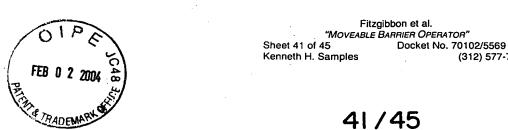
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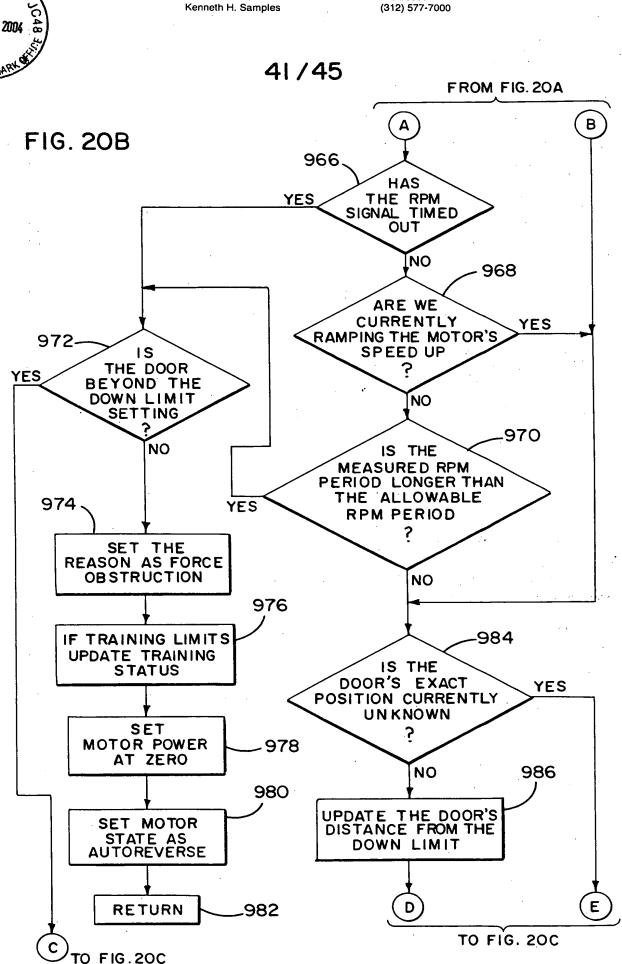
(312) 577-7000

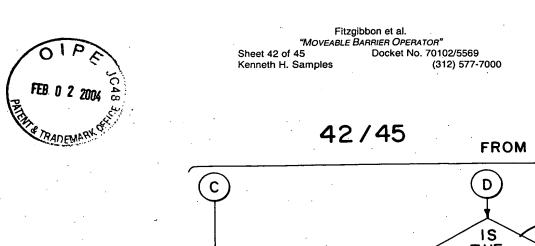


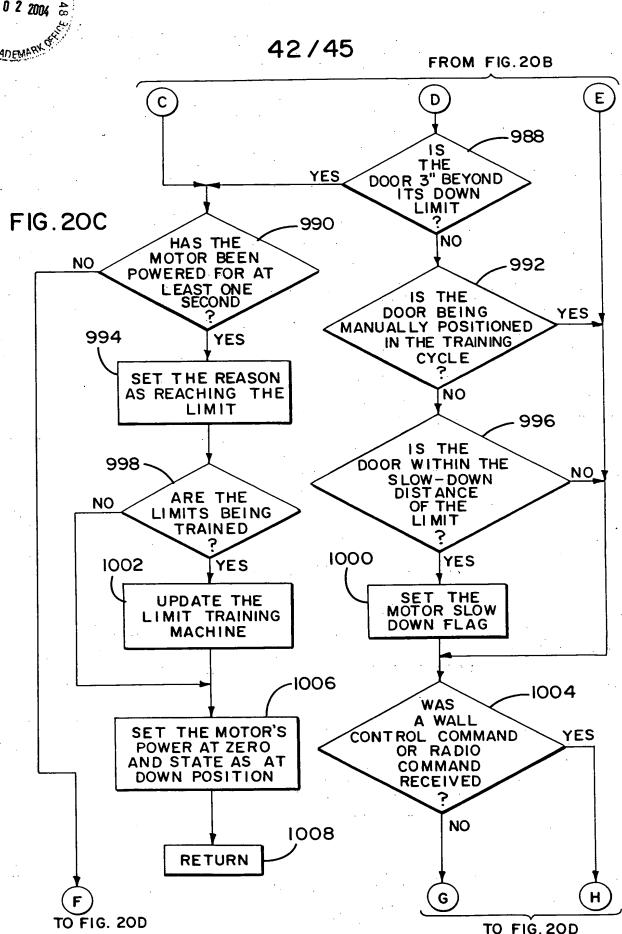
Kenneth H. Samples



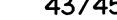


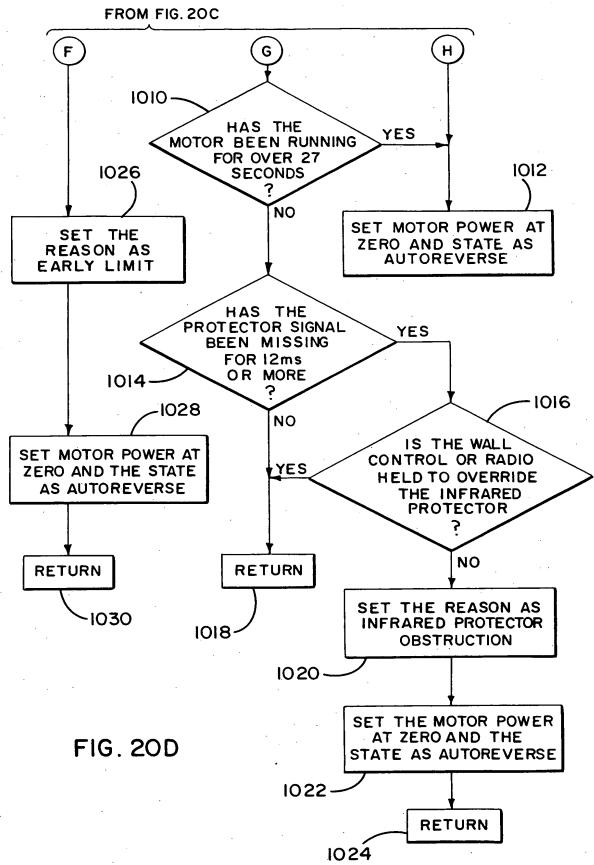






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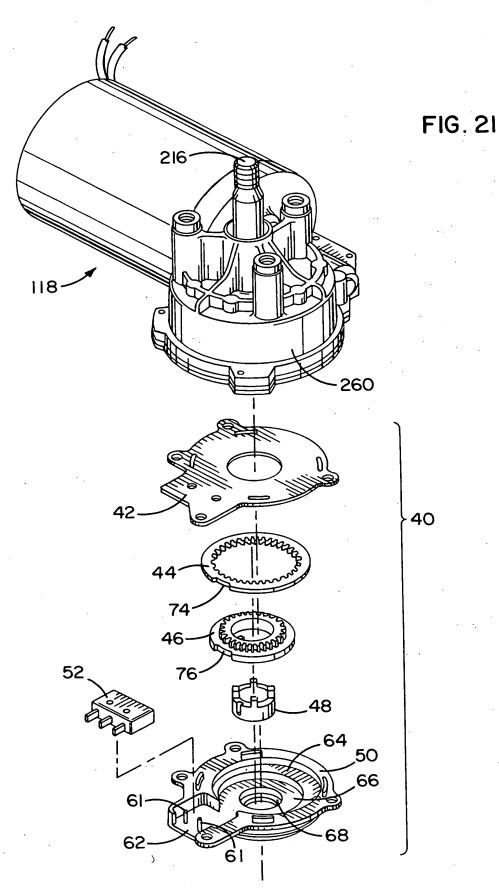






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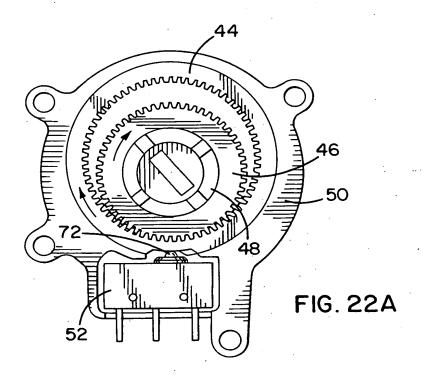


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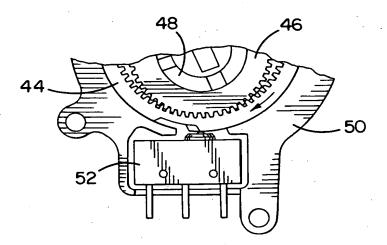


FIG. 22B